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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,845	03/12/2004	Klaus Lidolt	03100199AA	5020
36743 7590 11/24/2009 WHITHAM, CURTIS & CHRISTOFFERSON & COOK, P.C. 11491 SUNSET HILLS ROAD SUITE 340 RESTON, VA 20190				
EXAMINER JACKSON, BRANDON LEE				
ART UNIT		PAPER NUMBER		
3772				
MAIL DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/798,845

Applicant(s)

LIDOLT ET AL.

Examiner

BRANDON JACKSON

Art Unit

3772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

This Office Action is in response to amendments/arguments filed 8/6/2009. Currently, claims 1 and 3-15 are pending in the instant application.

Response to Arguments

Applicant's arguments filed 8/6/2009 have been fully considered but they are not persuasive. Applicant argues it is impermissible hindsight to modify the Nijebanning orthopedic aid with the detecting means and alerting means, as taught by Woo, because Woo discloses the locking device and alerting means may be used with a bicycle. However, the Nijebanning and Woo references are analogous pieces of art because they both disclose the use of remote controlled locking devices. When using a remote controlled device, it is beneficial to have an alert to the user of the change in state of the device being controlled by the remote in order to ensure the user knows the signal has reached the device and both the remote and device are functional. For example, if the user of the Nijebanning device believed he had overridden the automatic lock, but the signal had never actually traveled from the remote to the lock, then the user could sustain further injury by the orthopedic aid giving out when the user stands on it while believing it is locked, but when it actually is not. Moreover, there are numerous leg braces that include a remote and user alert systems that are visual and audible. Some examples of these types of devices are Stark et al. (US Patents 5,484,389; 5,823,975; 6,872,187)

Applicant argues the Naft reference does not teach a locking mechanism with slight play or a locking mechanism that cannot be unlocked by a torque on the account of frictional forces. However, Naft teaches a locking mechanism that is locked via the frictional forces of the plates upon each other when the magnetic coil is charged. When the locking mechanism is not in a locked state, the device has play that allows rotational movement of the hinge. When the locking mechanism is in a locked state, the magnetic coil forces the plates upon themselves, and that frictional force between the plates prevents movement rotational movement of the device.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3-5, 7, 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nijenbanning et al. (US Patent 6,979,304) in view of Woo (US Patent

6,462,431). Nijenbanning discloses an orthopedic aid (fig. 1) that is used for walking and providing a support function for the human body (2), comprising two parts (12,14) which are movable relative to one another, and a locking device (30) for locking the two parts (12,14) relative to one another. The locking device (30) is actuated (col. 1, lines 33-39) electromechanically to permit unlocking via handgrip (20). Nijenbanning fails to disclose a means for detecting the locking state and a means for alerting a user of the locking state. However, Woo discloses a remote locking device (50) comprising wireless controller (130), a means (112) for detecting the locking state (col. 3, lines 42-46), and a LED (122) that emits a visual signal to alert the user to a locked or unlocked state. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Nijenbanning device with a wireless controller to prevent tangling of the wire during usage, a means for detecting the locking state, and an LED to signal to the user to the locking state and prevent further injury by unexpected movement or non-movement of the device, as taught by Woo.

The Nijenbanning/Woo device teaches a signaling arrangement, which is the LED (122). The detecting means (112) electrically scans the locking state and generates an electric signal (fig. 3) as a function of the locking state.

Claims 6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nijenbanning/Woo as applied to claim 1 above and further in view of Stark et al. (US Patent 6,184,797) and Doty (US Patent 7,235,058). Nijenbanning/Woo fails to disclose a locking pin arranged to be drawn into a magnet coil to permit unlocking. However, Stark discloses an orthopedic aid (2") with two parts (6ab", 6aa") which are

movable relative to one another and with a locking device (21a) for locking the two parts (6ab", 6aa"), and a stator coil (45a) that can have a current pass through it to create a magnetic field to attract the brake and lock the hinge (21a) in place. Doty teaches a hinge (20) comprising a movable locking pin (106) that locks the hinge (20) in place. Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to Nijebanning/Woo locking device to have a locking pin that is movable via a magnetic coil, as taught by Doty, instead of the current locking device in order to prevent slippage of the hinge when it is intended to be in the locked position.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nijebanning/Woo/Stark/Doty as applied to claims 1, 6, and 8 above, and further in view of Naft et al. (U.S. Patent Application Publication 2002/0183673). Nijebanning/Woo/Stark/Doty substantially discloses the invention as claimed, see rejection of claims 1, 6, and 8 above, however Nijebanning/Woo/Stark/Doty fails to disclose an electromagnetic actuating arrangement with a low actuating force of not more than 2N; the locking mechanism cannot be unlocked by the actuating arrangement on account of frictional forces. However, Naft teaches an electromagnetic arrangement that operates at with relatively low electromagnetic attraction forces (paragraph 0050, lines 1-5). Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the joint of Nijebanning/Woo/Stark/Doty with that taught by Naft in order to allow the joint to operate with low power consumption from the battery.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nijenbanning/Woo as applied to claims 1, 11, and 13 above, and further in view of Stark (US Patent 6,184,797). Nijenbanning/Woo fails to disclose the handgrip of the walking aid is provided with a vibrator that can be actuated by the signal of the signaling arrangement. Stark teaches a vibrator (77) as a means of alerting the user instead of a visual or audio. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute a vibrator for the LED in order to provide signaling for those that are visually or hearing impaired.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANDON JACKSON whose telephone number is (571)272-3414. The examiner can normally be reached on Monday - Friday 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571)272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brandon Jackson/
Examiner, Art Unit 3772

/BLJ/

/Patricia Bianco/
Supervisory Patent Examiner, Art Unit 3772